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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,942	06/27/2003	Larry A. Woodgeard	190250-1050	6969

38823 7590 01/25/2007

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PHAM, THAI V	
ART UNIT	**PAPER NUMBER**
2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/608,942	WOODGEARD, LARRY A.	
	Examiner	Art Unit	
	Thai Van Pham	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/18/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is the initial office action based on the application filed on 06/27/2003.

Priority date that has been considered for this application is 06/27/2003.

Claims 1 – 30 are currently pending and have been considered below.

Specification

1. The disclosure is objected to because of the following informalities: typographical error(s). Errors are bracketed and crossed out, while assumed proper corrections are underlined in a quoted phrase below.

-- On page 2, paragraph [13]: "...[~~*automatiing*~~[*automating the life cycle* ... ".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1 – 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

-- Claim 1: recites "*A computer readable medium having a program*" as the claimed subject matter. Furthermore, the disclosure explicitly states that "...*The computer-readable medium can be, for example but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, system, device, or propagation*

medium ...Note that the computer-readable medium could even be paper or another suitable medium upon which the program is printed ... ". (paragraph [056]).

A product is a tangible physical article or object, some form of matter, which a signal is not. That the other product classes, machine and composition of matter, require physical matter is evidence that a manufacture was also intended to require physical matter. A signal, a form of energy, does not fall within either of the two definitions of manufacture. Thus, a signal does not fall within one of the four statutory classes of U.S.C. 101 (See MPEP 2106.01 (I)). Furthermore, "a paper or suitable medium upon which the program is printed" does not define any structural and functional interrelationships between the computer program and other elements of a computer which permit the computer program's functionality to be realized (See MPEP 2106.01 (I)).

In the principle of compact prosecution, Examiner anticipates the claims will be amended to limit only to a tangible physical article and not the propagation medium. With regards to the propagation medium, in paragraph [056] of the specification,

-- Claims 2 – 12: are dependent on claim 1. These claims all fail to remedy the problem with the non-statutory claimed subject matter of their parent claim (a computer product). Therefore, claims 2 – 12 are rejected for the same reason set forth in the 35 U.S.C. 101 rejection of claim 1 above.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 4, 16, 27 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-- Claim 3 contains the trademark/trade name JBuilder™ and Claims 4, 16, and 27 contain the trademark/trade name Ant™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe [3] and, accordingly, the identification/description is indefinite.

-- Claim 27 recites the limitation "the process engine". There is insufficient antecedent basis for this limitation in the claim.

-- Claim 30 recites the limitation "the text file". There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mackawa et al**. (US 6,848,101) in view of **Hiew et al**. (US 7,110,936).

-- Claim 1.

Mackawa discloses a *computer readable medium having a program for automating the life cycle of a software application* (FIG. 1, application 11), *where the software application utilizes computing resources distributed over a network* (FIG. 1, wide-area network **2**), *the program comprising logic configured to perform the steps of*:

• *creating a task list which describes how at least one stage in the life cycle is to be performed*; and

(FIG. 1 and associated text. e.g. Col. 5: lines 8 – 11; "...a script **2** describing the operation of the application ... ".)

• *processing the task list by a process engine to perform at least one stage in the life cycle*;

(FIG. 1 and associated text, e.g. Col. 5: lines 21 – 25; "...a script interpretation means **33** ... ".

FIG. 2 and associated text, e.g. Col. 6: lines 6 – 12; "...the content of the processing is interpreted by the script interpretation means **33** ...the script interpretation means **33** sends the request of processing in compliance with the interpreted content of processing to the application **11** to have it execute the processing (step S4)." Examiner notes that the script interpretation means is a module of a process engine.)

Mackawa, however, does not disclose that

- *the process engine is integrated with a development environment, where the development environment is used to develop the software application.*

Hiew discloses *a computer readable medium having a program for automating the life cycle of a software application* (Col. 5: line 57 – Col. 6: line 3), *where the software application utilizes computing resources distributed over a network* (Col. 6: lines 4 – 21), *the program comprising logic configured to perform the steps of:*

- *processing the task list by a process engine to perform at least one stage in the life cycle, the process engine is integrated with a development environment, where the development environment is used to develop the software application.*

(Integrated Development Environment (IDE) and associated figures, e.g. FIGS. 3 – 20, and text, e.g. Col. 2: lines 7 – 26.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the invention of **Mackawa** with an IDE as disclosed by **Hiew** to provide the user with the ability to seamlessly manage a software application in which its component modules are distributed over a network as well as to generate and update program/data flow in graphical forms.

-- Claim 2.

Mackawa and **Hiew** disclose *the computer readable medium of claim 1*, **Hiew** discloses that

• *the development environment is an integrated development environment.*

(Integrated Development Environment (IDE) and associated figures, e.g. FIGS. 3 – 20, and text, e.g. Col. 2: lines 7 – 26.)

-- Claim 3.

Mackawa and **Hiew** disclose *the computer readable medium of claim 2*, however, neither one discloses that

• *the integrated development environment includes JBuilder™.*

Hiew, however, discloses that the IDE executes on a Java Virtual Machine (FIG. 2 and associated text, e.g. Col. 4: lines 2 – 65).

It is well known that Borland JBuilder™ is an integrated development environment (IDE) for the Java programming language. JBuilder™ includes a comprehensive collection of tools, designers, and wizards to help user design, develop, test, deploy, and manage Java applications throughout their lifecycle. JBuilder also includes many ready-made components and templates to further increase consistency and productivity.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate JBuilder™ in **Mackawa and Hiew**'s IDE to support the user with a commonly known Java IDE.

-- Claim 4.

Mackawa and **Hiew** disclose *the computer readable medium of claim 1*, however, neither one discloses that

• *the process engine includes Ant™.*

Hiew, however, discloses that the IDE executes on a Java Virtual Machine (FIG. 2 and associated text, e.g. Col. 4: lines 2 – 65).

It is well known that Apache Ant™ is extended from a shell-based commands model using Java classes. Instead of writing shell commands, the configuration files are XML-based, calling out a target tree where various tasks get executed. Each task is run by an object that implements a particular Task interface.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Ant™ in **Mackawa and Hiew**'s IDE to support the user with a commonly known Java-based process engine.

-- Claim 5.

Mackawa and **Hiew** disclose *the computer readable medium of claim 1*, where

• *the software application utilizes computing resources through service providers connected to the network.*

(**Mackawa**: FIG. 1: remote management **32** and associated text, e.g. Col. 5: lines 26 – 29; "The remote management means **32** executes the processing such as downloading of the application **11** from the center server **1** and the deletion after the processing has been finished."

Hiew: FIG. 2: Site Manager **70** and associated text, e.g. Col. 8: line 51 – Col. 9: line 37; "The site manager **70** assists the local computer **22**b with access to the remote

computers **22a** ... ". FIG. 4f: "Execute program" and associated text, e.g. Col. 15: lines 21 – 26; "To execute code remotely ... ".)

-- Claim 6.

Mackawa and **Hiew** disclose *the computer readable medium of claim 1*, **Mackawa** further discloses that

• *the task list is stored in a text file.*

(FIG. 10: script **331** and associated text, e.g. Co. 9: lines 39 – 41; "...the script definition **331** ...correspond to the XML document.")

-- Claim 7.

Mackawa and **Hiew** *the computer readable medium of claim 6*, **Mackawa** further discloses that

• the text file is an XML file.

(FIG. 10: script **331** and associated text, e.g. Co. 9: lines 39 – 41; "...the script definition **331** ...correspond to the XML document.")

-- Claim 8.

Mackawa and **Hiew** the computer readable medium of claim 1, **Hiew** further discloses that

• *the task list includes a first task, the first task packages into a single file all files needed to run the software application.*

(**Mackawa** and **Hiew**'s disclosures are concerned with managing a software application in a distributed computing environment where component modules of the application

are distributed over different servers or local computers on a network. **Hiew** also discloses that when the application is to be executed remotely, the modules that are located remotely from the local computer where the IDE is presently running are copied to that local computer before the execution takes place (Col. 15: lines 11 – 20). The IDE subsequently compiles the modules to generate program/data flow as seen in FIGS. 9 and 17 – 20. Therefore, the files are compiled (into intermediate object files) and ultimately linked together to form an executable file in order for the IDE to generate and update the program/data flow graphs as depicted. Thus, they are packaged into a single file.)

-- Claim 9.

Mackawa and **Hiew** the computer readable medium of claim 1, wherein

• the task list includes a second task, the second task distributes the software

(**Mackawa**: FIG. 1: application to at least one remote computing resource. remote management **32** and associated text, e.g. Col. 5: lines 26 – 29; "The remote management means **32** executes the processing such as downloading of the application **11** from the center server **1** and the deletion after the processing has been finished."

Hiew: Col 15: lines 11 – 19; "To execute code remotely when the code resides on a remote computer **22**a, the code is first copied to a directory on the coal computer **22**b ... ".)

-- Claim 10.

Mackawa and **Hiew** *the computer readable medium of claim 1*, wherein

• *the task list includes a third task; the third task executes the software application on at least one remote computing resource.*

(**Mackawa**: FIG. 17 and associated text, e.g. Col. 13: lines 18 – 51. The application 11 is distributed to and subsequently executed on local servers 3a ... 3n.

Hiew: FIG. 4f: "Execute program" and associated text, e.g. Col. 15: lines 21 – 26; "To execute code remotely when the code resides on a local workstation/local computer **22**b, the user ... ".)

-- Claim 11.

Mackawa and **Hiew** *the computer readable medium of claim 1*, wherein

• *the task list includes a fourth task; the fourth task collects results from at least one remote computing resource.*

(**Mackawa**: FIG. 1: Highly Reliable Means and associated text, e.g. Col. 5: lines 30 – 33; "The highly reliable means **34** records event data that occur while the application 11 is being executed ... ".

Hiew: FIGS. 20a – c, "error log" and associated text.)

-- Claim 12.

Mackawa and **Hiew** *the computer readable medium of claim 1*, Mackawa further discloses that

• *the task list includes a fifth task; the fifth task removes the software application from at least one remote computing resource.*

(FIG. 1: remote management **32** and associated text, e.g. Col. 5: lines 26 – 29; "The remote management means **32** executes the processing such as downloading of the application **11** from the center server **1** and the deletion after the processing has been finished.")

-- Claims 13 & 14, 15, and 16 – 24.

Mackawa (FIG. 1) and **Hiew** (FIG. 1) disclose a system of claims 13 & 14, 15, and 16 – 24 for performing a method corresponding to the method performed by the computer product claims 1, 2, and 4 – 12, respectively. Therefore, claims 13 & 14, 15, and 16 – 24 are rejected for the same reason set forth in connection to the rejection of claims 1, 2, and 4 – 12 above, respectively.

-- Claims 25 – 30.

Mackawa (FIG. 1) and **Hiew** (FIG. 1) disclose a system of claims 25 – 30 for performing a method corresponding to the method performed by the computer product claims 1, 2, 4 – 7, respectively. Therefore, claims 25 – 30 are rejected for the same reason set forth in connection to the rejection of claims 1, 2, 4 – 7 above, respectively.

Conclusion

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. See the attached Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Van Pham whose telephone number is (571) 270-1064. The examiner can normally be reached on Monday - Thursday, 8am - 3pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TVP

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SUPERVISORY PATENT EXAMINER